

## ABSTRACT

At the time of preparing polyphenylene ether resin, there can be separated and recovered efficiently an aromatic compound solvent, amines making an azeotrope with water (hereafter, referred to as 'the amines' for short.) and methanol.

A method for producing polyphenylene ether, which comprises

(a) a step for synthesizing polyphenylene ether by subjecting phenol to oxidative polymerization in the presence of a copper compound and amines in an aromatic compound solvent,

(b) a step for precipitating polyphenylene ether particles by adding methanol into the solution of polyphenylene ether in the aromatic compound solvent obtained by the step (a),

(c) a step for solid-liquid separating a slurry of polyphenylene ether obtained by the step (b), and then washing the separated polyphenylene ether particles with methanol to obtain the polyphenylene ether,

(d) a step for adding water to a filtrate obtained by the step (c) to mix them, and then liquid-liquid separating the mixture into a phase consisting mainly of the aromatic compound and a phase consisting mainly of methanol and water, and

(e) a step for supplying the phase consisting mainly of methanol and water, obtained at the step (d) to the middle portion of a distilled column to perform distillation, and separating out a distillate liquid consisting mainly of methanol, a bottom liquid consisting mainly of water and a side-cut liquid containing the amines by distillation, recycling the distillate liquid consisting mainly of methanol as methanol of the steps (b) and (c), and recycling the side-cut liquid as part of the filtrate of the step (d).